

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P881248

Luminaire Tested: **24CZ2-60VHE-S-UNV-B35**

Issue Date: 10/2/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P881248  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473969)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-60VHE-S-UNV-B35  
Description: 2X4 6000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

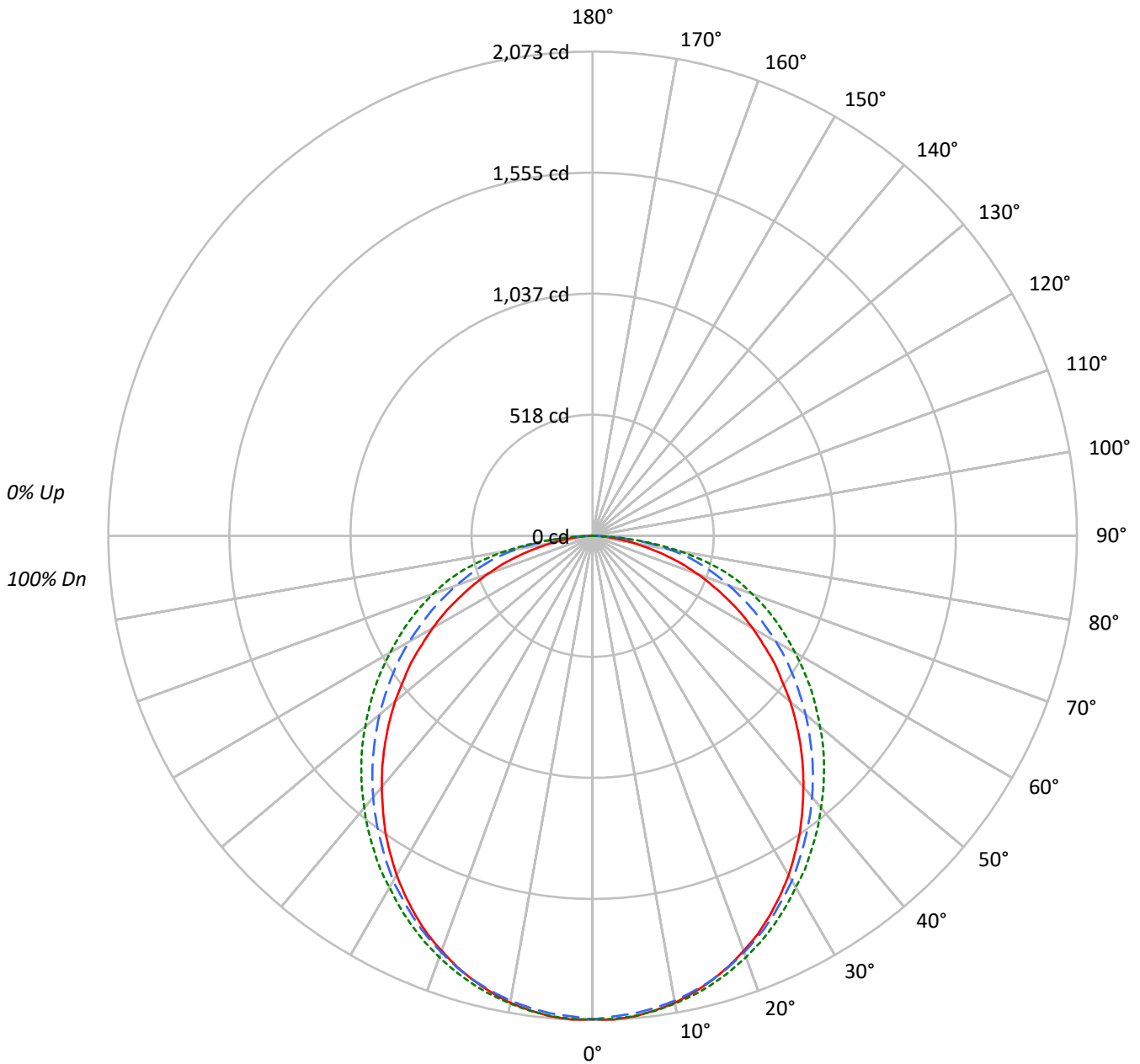
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5931.0 lumens  
Efficiency: N/A  
Efficacy: 126.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 47  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83																			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68																			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57																			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49																			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42																			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37																			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32																			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29																			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2922	2922	2922
5°	2926	2908	2923
10°	2910	2897	2914
15°	2879	2878	2903
20°	2840	2849	2884
25°	2793	2817	2861
30°	2734	2782	2834
35°	2665	2733	2818
40°	2586	2692	2802
45°	2508	2650	2796
50°	2424	2614	2789
55°	2337	2582	2805
60°	2230	2557	2824
65°	2112	2547	2892
70°	1970	2561	2995
75°	1753	2635	3155
80°	1433	2692	3080
85°	1010	2351	2398



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.7	3.3
10°-20°	557.4	9.4
20°-30°	835.6	14.1
30°-40°	995.2	16.8
40°-50°	1026.1	17.3
50°-60°	936.3	15.8
60°-70°	748.7	12.6
70°-80°	489.1	8.2
80°-90°	146.8	2.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1588.7	26.8
0°-40°	2583.9	43.6
0°-60°	4546.4	76.7
0°-90°	5931.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5931.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2070	2070	2070	2070	2070	
5°	2065	2061	2053	2065	2064	196
15°	1971	1972	1970	1986	1986	556
25°	1794	1796	1809	1836	1837	826
35°	1547	1558	1586	1626	1636	966
45°	1257	1279	1328	1383	1401	969
55°	950	977	1049	1118	1140	846
65°	632	675	763	838	866	627
75°	322	375	483	561	579	342
85°	62	112	145	148	148	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2070.3	2070.3	2070.3	2070.3	2070.3
2.5°	2073.2	2070.3	2059.4	2072.2	2070.3
5°	2065.4	2061.3	2052.6	2065.4	2063.5
7.5°	2049.7	2047.7	2039.0	2053.5	2051.6
10°	2030.2	2028.3	2021.5	2036.1	2033.1
12.5°	2003.0	2002.0	1997.2	2014.7	2012.7
15°	1970.7	1971.7	1969.8	1986.5	1986.5
17.5°	1933.8	1932.8	1936.7	1957.1	1955.2
20°	1890.9	1891.8	1896.7	1920.2	1920.2
22.5°	1846.2	1845.2	1855.9	1879.2	1881.1
25°	1793.5	1796.4	1809.0	1835.5	1837.4
27.5°	1736.9	1742.0	1757.5	1787.6	1790.6
30°	1677.6	1683.5	1706.8	1735.0	1738.9
32.5°	1612.3	1625.0	1646.3	1682.5	1692.2
35°	1547.0	1557.7	1586.1	1625.9	1635.6
37.5°	1474.9	1492.4	1524.7	1568.4	1581.2
40°	1403.8	1421.4	1461.3	1507.2	1520.8
42.5°	1331.6	1350.3	1396.0	1447.7	1462.3
45°	1256.8	1279.2	1327.8	1383.4	1400.8
47.5°	1179.8	1206.1	1258.8	1319.0	1338.6
50°	1103.8	1130.1	1190.5	1252.7	1270.4
52.5°	1022.0	1055.1	1119.4	1186.6	1204.1
55°	949.9	977.1	1049.2	1118.4	1139.8
57.5°	865.2	902.1	979.1	1049.2	1069.6
60°	790.1	824.1	906.0	977.1	1000.4
62.5°	714.1	749.1	830.9	911.8	933.4
65°	632.3	675.1	762.7	837.7	866.1
67.5°	554.4	599.1	688.9	768.5	797.9
70°	477.4	523.1	620.6	702.5	725.8
72.5°	401.4	449.2	550.5	630.4	657.6
75°	321.5	375.1	483.2	561.2	578.6
77.5°	246.5	305.9	415.0	467.7	480.3
80°	176.3	241.6	331.2	369.3	379.0
82.5°	115.8	179.2	247.4	267.8	264.9
85°	62.4	112.0	145.2	148.1	148.1
87.5°	24.3	44.9	45.9	35.0	33.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)